

BAZHANOVA, N.V.; MASLOVA, T.G.; POPOVA, I.A.; POPOVA, O.F.;
SAPOZHNIKOV, D.I.; DYDEL'MAN, Z.M. Prinimali uchast'ye:
CHERNOMORSKIY, S.M.; MENITSKAYA, I.M.; SAPOZHNIKOV, D.I.,
otv. red.

[Plastid pigments of green plants and the methods of their
study] Pigmenty plastid zelenykh rastenii i metodika ikh
issledovaniia. Moskva, Izd-vo "Nauka," 1964. 119 p.
(MIRA 17:7)

1. Akademiya nauk SSSR. Botanicheskiy institut. 2. Labora-
toriya fotosinteza Botanicheskogo instituta im. V.L.
Komarova AN SSSR (for all except Sapozhnikov).

VALIULLINA, R.T.; CHERNOMORSKIY, V.N.

Correlation of the lower Carboniferous terrigenous stratum of northwestern Bashkiria based on the palynological and ~~mineralogical~~ analysis of clayey rocks. Dokl. AN SSSR 139 no.5:1181-1184 Ag. '61. (MIRA 14:8)

1. Predstavleno akademikom D.V. Nalivkinym.
(Bashkiria—Geology, Stratigraphic)

MUSIN, M.Kh.; CHERNOMORSKIY, V.N.; NADEZHKIN, A.D.

Synoptic geological section of lower Carboniferous terrigenous
deposits of northwestern Bashkiria. Dokl. AN SSSR 143 no.3:674-
677 Mr '62. (MIRA 15:3)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut. Predstavleno
akademikom N.M. Strakhovym.
(Bashkiria--Geology, Stratigraphic)

MUSIN, M.Kh.; CHERNOMORSKIY, V.N.; CHUNOSOV, P.I.

Structure and correlation of sand beds in the terrigenous formation of the Lower Carboniferous in Bashkiria. Geol. nefti i gaza 7 no.6:38-41 Je '63. (MIRA 16:9)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

1(2);2(10)

PHASE I BOOK EXPLOITATION

SOV/2229

Chernomorskiy, Yakov L'vovich

Reaktivnaya tekhnika (Jet Propulsion Engineering) [Irkutsk] Irkutskoye knizhnoye izd-vo, 1957. 59 p. (Series: Nauchno-populyarnaya biblioteka) 3,000 copies printed.

Ed. A.S. Shafirova; Tech. Ed.: T.I. Sorokina.

PURPOSE: The booklet is intended for the general reader interested in jet propulsion.

COVERAGE: The booklet presents the basic principles of jet propulsion and gives a brief history of the development of jet propulsion theory. Data illustrating the present state-of-art are included. In the chapter on prospective development of jet propulsion a description and a diagram of an atomic jet engine designed by Professor G.I. Pokrovskiy, Doctor of Technical Sciences, are given. Tests of atomic reactors for use on aircraft and the con-

Card 1/3

Jet Propulsion Engineering

SOV/2229

struction of an aircraft with an atomic engine in the USSR are mentioned. Mention is made of the uses of artificial satellites.

TABLE OF CONTENTS:

Introduction	3
Physical Bases of Flight	5
Principle of the Design and Operation of Rocket Engines	11
Rocket Jet Engines	12
Air Feed Jet Engines	17
Jet Aircraft	25
Rocket Aircraft	39
Rockets and Rocket Aircraft	41
Prospective Development of Jet Propulsion Engineering	51
Card 2/3	

Jet Propulsion Engineering

SOV/2229

Conclusion

57

AVAILABLE: Library of Congress

Card 3/3.

IS/bg
8-17-59

CHERNOMORSKOV, A.G.

Category: USSR / Diseases of Farm Animals. General Problems.

V-1

Abs Jour: Ref Zhur-Biologiya, No 16, 1957, 72264

Author : Chernomorskov A. G.

Inst : Not given

Title : The Castration of Rams

Orig Pub: Tr. Saratovsk. Zootechn.-Vet. In-ta, 1956, 6, 202-209

Abstract: The technical and economical side of castration of rams by the method of subcutaneous destruction of innervation and vascularization of testicles (endoorchidectomy) is described. The general increase in weight in the animals castrated at the age of $3\frac{1}{2}$ months by the subcutaneous method is by 106-118 percent higher than in those castrated "by ligature" in the same age group, and the collection of wool is greater by 14.3 - 30.9 percent. The quality and quantity of meat are improved, too.

Card : 1/1

-14-

CHERNOMORTSEVA, N.I.

Infectious Diseases

Dissertation: "Fungus Flora and Fauna of the human Skin." Cand Med Sci, Minsk State Medical Inst, 8 Apr 54. (Sovetskaya Belorussiya, Minsk, 26 Mar 54).

SO: SUM 213, 20 Sep 54

CHERNOMORTSEVA, N.I.

Actinomyces albus causing superficial dermatitis. Sbor.nauch.rab.
Bel.nauch.-issl.kozhno-ven.inst. 4:149-154 '54 (MIRA 11:7)
(ACTINOMYCES)
(DERMATOMYCOSIS)

CHERNOMORTSEVA, N.I.

Microflora of the healthy human skin. Sbor.nauch.rab.Bel.nauch.
-issl.kozhno-ven.inst. 4:157-162 '54 (MIRA 11:7)
(DERMATOPHYTES)

CHERNOMORTSEVA, N. I.

Recovery of seven fungi from single source. Sbor.nauch.rab.
Bel.nauch.-issl.kozhno-ven.inst. 4:163-168 '54 (MIRA 11:7)
(FUNGI, PATHOGENIC)

CHEBNOMORTSEVA, N.I.

~~SECRET~~ A case of recovery of the fungus Scopulariopsis. Sbor.nauch.rab.
Bel.nauch.-issl.kozhno-ven.inst. 4:169-173 '54 (MIRA 11:7)
(DERMATOPHYTES)

USSR/Pharmacology and Toxicology. Chemotherapeutic Preparations
Antibiotics

V-7

Abs Jour : Ref Zhur - Biol., No 15, 1958, No 71286

Author : Prokopchuk A.Ya., Chernomortseva N.I., Bondarovich A.G.,
Karpovich Ye.A., Tselisheva A.D., Margolina S.Yu., Raytsina
M.A., Roxovskiy L.N.

Inst : Belorussian Scientific Research Dermatovenereal Institute

Title : The So-Called Candida Mycoses Enterites and Nephrites Oc-
curring During Treatment with Antibiotics.

Orig Pub : Sb. nauchn. rabot. Belorussk. n.-t. kozhno-venerol. in-t,
1957, 5, 307-318

Abstract : No abstract

Card : 1/1

CHERNOMORTSEVA, N.I.

Some data on medical mycology. Trudy VIZR no. 53:327-328 '64.
(MIRA 19:2)

KOLESNIKOVA, A.A.; KOSTYUK, N.G.; CHERNOMUROVA, V.M.; SHCHEGOLEV,
D.Ye.; LOTYSHEV, I.P., red.

[Gelendzhik and its surroundings] Gelendzhik i ego okre-
stnosti. Krasnodar, Krasnodarskoe knizhnoe izd-vo, 1964.
78 p. (MIRA 18:1)

^R
CHERNOMYR^{DR}IN, I.

"On the Action of Magnetic Anomalies at Intermediate Altitudes,"
by Pilot I. Chernomyrdin, Baku Grazhdanskaya Aviatsiya, No 8, Aug 56,
p 19

The author says that in the region of Belgorod practice flights have shown that magnetic anomalies act on magnetic compasses up to altitudes of 2,400-3,000 M. There the needle is deflected to the side of the true meridian by 20-30°. The author concludes by giving recommendations for compensating the needle error in flight.

Sum 1274

L 10339-67 EWP(j)/EWT(m) IJP(c) RM/DS

ACC NR: AP6029908

(A)

SOURCE CODE: UR/0413/66/000/015/0086/0086

INVENTORS: Kolesnikov, G. S.; Tevlina, A. S.; Novikova, S. P.; Levin, B. B.; Chernomyrdina, L. F.; Abramova, T. D. 45

ORG: none

TITLE: A method for obtaining heat-resistant and chemically stable cationite membranes. \ Class 39, No. 184427 \ /announced by Moscow Institute of Chemical Technology Im. D. I. Mendeleyev (Moskovskiy khimiko-tehnicheskii institut)/

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 86

TOPIC TAGS: ion exchange membrane, monomer, polymer, graft copolymer, fluorine, acrylic acid

ABSTRACT: This Author Certificate presents a method for obtaining heat-resistant and chemically stable cationite membranes by grafting monomer compounds containing ionogenic groups to fluorine-containing copolymers. \ To obtain membranes characterized by a selectivity in separating the ions of polyvalent metals, a mixture of α -phenylvinyl phosphinic acid and acrylic acid or acrylonitril is used as the monomer compound. 15

Card 1/1 ^{me} SUB CODE: 07/ SUBM DATE: 13May65 UDC: 661.103.123.2:678.743-139

CHERNOMYS, A., kapitan 2-go ranga

Discovery of the sea. Voen. znan. 42 no.1:13 Ja '66.
(MIRA 19:1)

L 36933-66

ACC NR: AN6005750

(IV)

SOURCE CODE: UR/9008/65/000/255/0002/0002

AUTHOR: Chernomys, A. (Commander)

ORG: none

TITLE: Amphibious landing

SOURCE: Krasnaya zvezda, no. 255, 1965, 2, col. 1-3

TOPIC TAGS: military training, amphibious warfare training, medical personnel

ABSTRACT: A practice assault landing exercise is described from the point of view of naval medical personnel. The exercise involved the setting up of field stations for treating victims of shock, burns, radiation sickness, etc. Simple measures against seasickness are described. The author laments the lack of psychological training of troops in solving combat training problems under complex conditions.

SUB CODE: 05, 15/ SUBM DATE: none

Cord 1/1 *ell*

CHERNONOG, L. T.

CHERNONOG, L. T. -- "Evaluation of Certain Procedures of Cultivating Perennial Grasses in North Kazakhstan Oblast." Kazakh Affiliate, All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin.. Sci Res Inst of Farming imeni Academician V. R. Vil'yams. Alma-Ata, 1955.
(Dissertation for the Degree of Candidate in Agricultural Sciences).

SO: Knizhnaya Letopis', No 9, 1956

USSR/Cultivated Plants - Grains.

11-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39177

Author : Chernonog, L. T.

Inst : -

Title : Periods of Spring Sowing of Grain Crops in the Northern Kazakhstanskaya Oblast.

Orig Pub : Zemledeliye, 1957, No 4, 43-46.

Abstract : A large-scale production test and data furnished by scientific institutions show the advantages of sowing summer wheat in the second 10 day period in May. The yield of oats and barley is higher when these crops are sown during the first days of May. The yield is lower when the sowing takes place earlier, because the plants are affected by unfavorable weather conditions. During sprouting, the temperature of the soil is too low. When ears are formed and the grain ripens, droughts occur. Sowing during the first, second, and third ten days of

Card 1/2

USSR/Cultivated Plants - Grains.

M-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39177

May makes it possible for weeds to be successfully controlled by means of pre-sowing cultivation. This also increases the yield of summer grains. -- V.A. Vnuchkova.

Card 2/2

- 15 -

USSR/Cultivated Plants - Grains.

11-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39200

Author : Chernonog, L.T., Kholdiryakova, A.N.

Inst : Kazakh Scientific Research Institute of Agriculture

Title : Taking into Account the Peculiarities in the Nature of Varieties at Separate Harvesting.

Orig Pub : Zemledeliye, 1957, No 6, 15-18.

Abstract : Experiments to study the properties resulting from the separate harvesting of summer wheat of the Smena, Mil'turum 321, Saratovskaya 29, Mil'turum 553, Gordeylovna 10 varieties were conducted by the Kazakh Scientific Research Institute of Agriculture in 1956. The least loss of grain was experienced by moving the wheat at the waxy stage and by threshing according to the readiness of the stacks. The grain losses for the Mil'turum 553 variety which sheds

Card 1/2

USSR/Cultivated Plants - Grains.

11-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39200

easily were somewhat higher when it was mowed at the stage of full waxy ripeness. Leaving stacks in the field for 10-12 days did not cause any important loss in the harvest. It is recommended that species which shed readily (Ml'-turun 553 and 321) be cut during the waxy stage. Species which have an average shedding rate or shed very little (Smena, Saratovskaya 29) should be mowed at the end of the waxy period and at the beginning of the period of full ripeness. -- N.F. Fedorova

Card 2/2

- 30 -

CHERNOMOG, L., kand.sel'skokhozyaystvennykh nauk

Applying T.S. Mal'tsev's methods on fields of northern
Kazakhstan. Nauka i pered. op. v sel'khoz. 8 no.9:30-31
S '58. (MIRA 11:10)

1. Kazakhskiy nauchno-issledovatel'skiy institut zemledeliya imeni
V.R. Vil'yamsa.
(Kazakhstan--Tillage)

CHERNONOG I.T.; MASLOVSKAYA, A.D.

Agroclimatic basis for the optimal sowing time of spring wheat in
the Virgin Territory. Trudy KazNIGMI no.21:3-15 '64. (MIRA 17:11)

ANISTRATENKO, D.P.; CHERNONOG, L.T.; MASLOVSKAYA, A.D.

Agrometeorological conditions of the formation of a harvest of
spring wheat of different times of sowing in the Virgin Territory.
Trud KazNIGMI no.24:133-146 '65.

(MIRA 18:10)

CHERNONOG, L.T.

MASLOVSKAYA, A.D.; CHERNONOG, I.T.

Effect of meteorological conditions on the state of the kernel of
headed spring grain crops in harvesting by stages in the Virgin
Territory. Trudy KazNIGMI no.24:747-153 '65.

(MIR: 18:10)

CHERNONOG, Ya.I.

SERDYUKOV, P.I., inzhener; CHERNONOG, Ya.I., inzhener.

Forging rollers for 200-ton pressure. Vest.mash.34 no.1:42-43
Ja '54.

(MLRA 7:2)

(Rolls (Iron mills)) (Forging)

PONOMARENKO, V.G.; ELLIS, S.V.; CHERNONOSOV, Ye.Ye.

Optimizing control system for rapid technological processes.
Koks i khim. no.11:57-62 '62. (MIRA 15:12)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy
koksokhimicheskoy promyshlennosti.
(Chemical apparatus) (Automatic control)

AUTHOR: Chernook, S. V.

SOV/6-58-9-7/26

TITLE: Some Problems Concerning the Method of Compiling Small-Scale Geobotanical Maps (Nekotoryye voprosy metodiki sostavleniya melkomasshtabnykh geobotanicheskikh kart)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 9, pp 38 - 43 (USSR)

ABSTRACT: At present numerous cartographic agencies of the Glavnoye upravleniye geodezii i kartografii MVD SSSR (Central Administration of Surveying and Cartography of the Ministry of the Interior USSR) switch over to the compilation of special large-scale maps. This paper pools the information gained in the compilation of the map showing the flora of the USSR at a scale of 1: 1 500 000. The geographical basis of this map was the 1: 1 000 000 map of the USSR, at the same time data were used from the topographical and soil maps, which are drawn at a scale of 1: 1 000 000. Items of special content were compiled according to the map of the flora of Middle Asia, which is drawn at a scale of 1: 1 000 000. This map was published by the AS USSR in 1956. Firstly this map is briefly

Card 1/2

Some Problems Concerning the Method of Compiling Small - Scale Geobotanical Maps SOV/6-58-9-7/26

criticized and then the process of producing the 1: 1 500 000 map is described. This process is elucidated by some examples. Finally the main requirements to be complied with in the compilation of such maps are laid down. There are 3 figures.

Card 2/2

BOGDANOV, A.A.; UDINTSEV, G.B.; KHAIN, V.Ye.; CHERNOOK, S.V.

Plan for compiling the First International Tectonic Map of
the Earth. Sov. geol. 7 no.11:99-105 N '64. (MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet, Institut okeanologii
AN SSSR i Komissiya po mezhdunarodnym tektonicheskim kartam
AN SSSR.

DOLITSKIY, A.V.; CHERNOOK, S.V.

General results of the discussion on the International Tectonic
Map of Europe. Geotektonika no.5:102-113 S-O '65. (MIRA 19:1)

1. Komissiya po Mezhdunarodnym tektonicheskim kartam AN SSSR.
Submitted May 27, 1965.

GATOVSKIY, K.M., kand.tekhn.nauk; CHERNOLAZ, F.A., inzh.

Effect of the size limit of products on the heat convection
process and welding ~~for~~ ^{for} ~~the~~ ^{the} ~~process~~ ^{process} ~~no.~~ ^{no.} ~~18:1~~ ^{18:1} (MIRA 18:1)

1. Leningradskiy institut vodnogo transporta.

CHERNOPEROV, N. Ye.

100-7-7/11

AUTHORS: Myasnikov, V.G., Puchkov, Yu.N. and Chernoperov, N.Ye.,
Engineers.

TITLE: Mobile Crushing and Sorting Plant (Peredvizhnaya drobil'no-
sortirovochnaya ustanovka)

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1957, vol.14, no.7,
p. 21 (USSR).

ABSTRACT: This plant consists of 2 machines: CM-311 and CM-312
and is used for crushing materials with a crushing strength up
to 2 500 kg/cm². Technical data are tabulated. All operations
are directed from the operator's cabin which is situated on
the platform. The crushed material is transported to the
bunkers by conveyors. The bunkers are so constructed that
various fractions can be mixed. This plant is manufactured by
the vyksunsk Factory for Crushing and Sorting Equipment
(vyksunskiy zavod drobil'no-sortirovochnogo oborudovaniya).
There is 1 table.

AVAILABLE: Library of Congress
Card 1/1 1. Construction-Equipment

ACCESSION NR: AP4013306

S/0032/64/030/002/0197/0201

AUTHORS: Iglitsy*n, M. I.; Levinzon, D. I.; Chernopisskiy, V. U.

TITLE: Uniformity control in germanium single crystals using the single probe method

SOURCE: Zavodskaya laboratoriya, v. 30, no. 2, 1964, 197-201

TOPIC TAGS: resistivity, germanium crystal, electrical contact, differentiating RC-circuit, semiconductor

ABSTRACT: The method and experimental details for automatically recording the resistivity distribution over a bar of germanium crystal have been described. The method consists of measuring the potential drop $V(x)$ between a probe, moving over the crystal surface x , and an electrical contact in a differentiating RC-circuit. The resistivity is determined from the expression

$$V = RC \cdot v \cdot \frac{I}{s} \rho(x),$$

where v - probe speed, s - crystal area, I - current. The speed v is varied

Card 1/2

ACCESSION NR: AP4013306

within $(2-3) \times 10^{-3}$ cm/sec, $R = 3$ kohm, $C = 102 \mu f$, registering resistivities $\rho(x)$ of the order 0.1 to 50 ohm. cm. The analysis is based on the assumption of negligible intermediate resistance between probe (pen) and semiconductor. Some of the components in the circuit include: a potentiometer EPP-05 type 4, amplifier N-373-1 and ferroresonance stabilizer type S-0.5. The results show a uniform statistical fluctuation in $\rho(x)$ along a mean value. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskey promyshlennosti (State Scientific Research and Project Institute of the Rare Metal industries)

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 003

Card 2/2

CHERNOPLEKOV, N. A.
CA

2

Tables of heat capacity functions for heterodynamic structures. N. A. Chernoplekov. (1) 1. Mendelevy, inst. Chem. Technol., Moscow, 1978. 28, 878-88 (1981). - Tables of heat capacity functions are calculated for use in connection with the structure of layer or chain structures. These calens. are based on the work of Tarsanov (C.1. 39, 5163; 41, 6120; 44, 4742). The functions $C_p = D_1(\theta/T) + (\theta_1/\theta) [D_2(\theta_1/T) - D_2(\theta/T)]$ (1) and $C_v = D_2(\theta/T) - (\theta_1/\theta) [D_2(\theta_1/T) - D_2(\theta/T)]$ (2) are calculated. θ and θ_1 are, resp., characteristic temps. and Debye functions for 1-, 2-, and 3-dimensional (subscript) continuums. C_p and C_v are calculated for $0 < (\theta/T) < 20$ and $0 < (\theta_1/T) < 1$, both at 0.1 intervals. The values obtained which are accurate within 0.5% are also presented in diagrams. Michel Boudart.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308520018-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308520018-4"

U.S.

Program

Vol 25, Nr 3.

CHERNOMIR, A. A.

Quantum Theory of
Structures

The original and
theory approach to
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CHERNOPLEKOV, N. A., ZEMLYANOV, M. G.

"Cold Neutron Facility for the Studies of the Dynamics of Condensed Matter
Utilizing Inelastic Scattering of Neutrons."

paper presented at the Symposium of the International Atomic Energy Agency on Pile
Neutron Research in Physics, Vienna, 17-21 Oct 1960.

Institute for Atomic Energy imeni I. V. Kurchatov, of the USSR Academy of Sciences.

CHERNOPLEKOV, N. A.; ZEMLYANOV, M. G.; CHETSERIN, A. G.

"The study of inelastic scattering of neutrons in the Ti-Zr alloy"

Paper to be presented at the International Atomic Energy Agency
(IAEA) - Symposium on Inelastic Scattering of Neutrons in Solids
and Liquids - Chalk River, Canada, 10-14 Sept. 1962

attended
Atomic Energy
Vol. 2, 1963

ZEMLYANOV, M. G.; CHERNOPLEKOV, N. A.

"The study of inelastic scattering of cold neutrons
in some hydrogen containing substances"

Paper to be presented at the International Atomic Energy Agency
(IAEA) - Symposium on Inelastic Scattering of Neutrons in Solids
and liquids - Chalk River, Canada, 10-14 Sept. 1962

ZEMLYANOV, M.G.; KAGAN, D. M.; CHERNOPLEKOV, N. A.; CHETSERIN, A. G.

"The study of the phonon spectrum and dispersion curves in vanadium"

paper to be presented at the International Atomic Energy Agency
IAEA) - Symposium on Inelastic Scattering of Neutrons in Solids
and Liquids - Chalk River, Canada, 10-14 Sept. 1962

S/120/62/000/005/007/036
E039/E420

AUTHORS: Zemlyanov, M.G., Chernoplekov, N.A.

TITLE: Apparatus for investigating the dynamics of materials in the condensed state with the aid of non-elastic scattering of cold neutrons

PERIODICAL: Pribery i tekhnika eksperimenta, no.5, 1962, 40-47

TEXT: A detailed description of the apparatus is given. It is mounted on experimental channel No.6 of the WPT-1000 (IRT-1000) reactor. The thermal neutron flux from this reactor when operating at 1000 kW is 1.7×10^9 n/cm² sec and has a Maxwellian distribution corresponding to a temperature of 380°K and a cadmium ratio of 30 ± 1 . The flux of neutrons with energy less than 5×10^{-3} eV (cold neutrons) is $\sim 1.5\%$ of the total flux. A preliminary filter of five uncooled steel discs 9.7 cm diameter and 1 cm thick is used followed by the main cooled filter of five beryllium discs 10 cm diameter and 5 cm thick. These Be discs are mounted inside a cadmium tube contained in a cavity filled with He gas which is cooled by a liquid nitrogen jacket. Thermal insulation consists of a vacuum jacket and aluminium radiation

Card 1/3

S/120/62/000/005/007/036
E039/E420

Apparatus for investigating ...

screen. One filling (4 litres) of liquid nitrogen lasts for 8 hours. After the neutron beam has passed through these filters the flux of cold neutrons is 6×10^6 neutrons/cm² sec and the cadmium ratio is 7×10^3 . The neutron spectrum determined by time of flight in the energy range of 10^{-1} to 10^{-3} eV shows that the average wavelength of the neutrons is 4.8 Å. Details of the scattering chamber which contains the sample, and also the mechanical neutron chopper are given. The angular divergence of the incident beam is 4°. Neutrons scattered at an angle of 90° pass through a window in the scattering chamber wall, through the chopper and on to the detector at a distance of 495.2 cm from the chopper. The detector consists of 20 proportional counters filled with BF₃ (85% B¹⁰) at a pressure of 700 mm. Each counter is 3.5 cm in diameter and 100 cm long and has a counting efficiency of 40% for thermal neutrons. Details of the associated electronics are given and the results are analysed on a 128 channel time analyser. The neutron spectrum for cold neutrons scattered elastically by vanadium is measured. This required 10 hours with the chopper working at 2600 rpm and using Card 2/3

Apparatus for investigating ...

S/120/62/000/005/007/036
E039/E420

a parabolic slit of 0.8 mm width and with the time analyser channel width at 64 μ sec. A spectrum of non-elastic scattering of cold neutrons by vanadium requiring 100 hours is also obtained. Data on non-elastic scattering is to be published later. There are 11 figures.

ASSOCIATION: Institut atomnoy energii AN SSSR
(Institute of Atomic Energy AS USSR)

SUBMITTED: December 16, 1961

Card 3/3

41437
S/120/62/000/005/011/036
E192/E382

24.6500

AUTHORS:

Golovin, A.Ye., Zemlyanov, M.G., Tsitovich, A.P.
and Chernoplekov, N.A.

TITLE:

A system of time delays based on magnetostrictive lines
for transit-time neutron spectroscopy

PERIODICAL:

Pribory i tekhnika eksperimenta, no. 5, 1962,
77 - 79

TEXT:

In comparison with univibrators for phantastons, magnetostrictive lines have the advantage that delays produced by them can be accurately varied over a wide range. The system of delays for the transit-time neutron spectroscopy is based on such lines. These are in the form of nickel wire passing through the axes of two coils. One of the coils receives a current pulse when a neutron is recorded by a group of counters associated with the line; the second coil then produces a delayed signal. The delay time is varied by shifting one coil relatively to the other. The whole delay system is based on four magnetostrictive lines and its block diagram is shown in Fig. 1. The signal from each group of counters is amplified, passed through the

CHERNOPLEKOV, N.A.; ZEMLYANOV, M.G.; CHICHERIN, A.G.

Study of the phonon spectrum of vanadium. Zhur.eksp.i teor.
fiz. 43 no.6:2080-2085 D '62. (MIRA 16:1)
(Neutrons—Spectra) (Neutrons—Scattering) (Vandium)

CHERNOPLEKOV, N. A.; ZEMLYANOV, M. G.; BROVMAN, Ye. G.; CHICHERIN, A. G.

Inelastic neutron scattering on a Ti-Zr alloy. Fiz. tver. tela
5 no.1:112-117 Ja '63. (MIRA 16:1)

1. Institut atomnoy energii imeni I. V. Kurchatova, Moskva.

(Neutrons—Scattering)
(Titanium-zirconium alloys)

S/089/63/014/002/015/019
B102/B186

AUTHOR: Chernoplekov, N.

TITLE: Second International Symposium on Inelastic Neutron
Scattering in Solids and Liquids

PERIODICAL: Atomnaya energiya, v. 14, no. 2, 1963, 221-222

TEXT: A report is given on the Second IAEA Symposium at the Canadian Research Center (Chalk River) in September 1962. The USSR was represented by the OIYaI organization and 6 lectures were delivered by Soviet scientists: M.G. Zemlyanov et al. (Investigation of the phonon spectrum and the dispersion curves for vanadium); N.A. Chernoplekov et al. (Investigation of the nickel phonon spectrum); N.A. Chernoplekov et al. (Investigation of inelastic neutron scattering in Ti-Zr alloy); A. Bayorik et al. (OIYaI) (New results on inelastic neutron scattering in water); V.V. Golikov et al. (OIYaI) (Usage of the WBP (IBR) reactor as a neutron source for inelastic scattering experiments). From Poland, J. Krasnicki reported on inelastic magnetic scattering measurements with franklinite and chromium oxide. ✓

Card 1/1

ZEMLYANOV, M.G.; CHERNOPLEKOV, N.A.

Inelastic scattering of cold neutrons on some hydrogen-containing
substances. Atom.energ. 14 no.3:257-263 Mr '63. (MIRA 16:2)
(Neutrons—Scattering)

L 17604-63
FCG(w)/BDS

EWI(1)/EWP(q)/EWI(m)/
AFFTC/ASD/IJP(C) PAD JD/HW

S/056/63/044/003/013/055

62

AUTHOR: Chernoplekov, N. A., Zemlyanov, M. G., Chicherin, A. G., and Lyashchenko, B. G.

TITLE: The phonon spectrum of nickel ²⁷

PERIODICAL: Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3, 1965, 858-860

TEXT: The only existing investigation of the phonon spectrum using a fully incoherent slow neutron scattering as suggested by Placzek and Van Hove (Ref. 1: Phys. Rev., 93, 1207, 1954) was done by three of the authors, Chernoplekov, Zemlyanov, and Chicherin (Ref. 2: ZhETF, 43, 2080, 1962). The present paper reports results of inelastic scattering of slow neutrons on a sample of nickel isotope alloy with a zero mean coherent amplitude. Nickel as well as vanadium is a transition metal but has a face-centered cubic structure allowing the comparison of its phonon spectrum with that of the body-centered cubic lattice of vanadium (see Fig. 2). Measurements were carried out using a time of flight neutron spectrometer. The expansion coefficients of the normal mode oscillation frequency

Card 1/3

L 17604-63

S/056/63/044/003/013/053

0

The phonon spectrum of nickel ...

distribution function $g(\omega)$ are listed in Table 1. The displacement of the Ni phonon spectrum maxima towards higher energies indicates the existence of a strong constant interatomic interaction transcending that in V. There are 2 figures and 1 table

Table 1. Expansion coefficients of the $g(\omega)$ function

α	ϵ_α	$I_{\alpha 0}$	$I_{\alpha 1}$	$I_{\alpha 2}$	$I_{\alpha 3}$	$I_{\alpha 4}$	$I_{\alpha 5}$	$I_{\alpha 6}$	$I_{\alpha 7}$
0	8,0	0,0169							
1	-4,4	-0,0215	0,0410						
2	-2,6	0,0244	-0,0387	0,0397					
3	-0,4	-0,0134	0,0400	-0,0364	0,0417				
4	-0,4	0,0150	-0,0203	0,0413	-0,0367	0,0466			
5	0,6	-0,0064	0,0300	-0,0184	0,0466	-0,0387	0,0525		
6	-0,5	0,0166	-0,0084	0,0364	-0,0167	0,0544	-0,0430	-0,0626	
7	-0,7	-0,0005	0,0410	-0,0031	0,0456	-0,0016	0,0682	0,0472	0,0751

Card 2/3

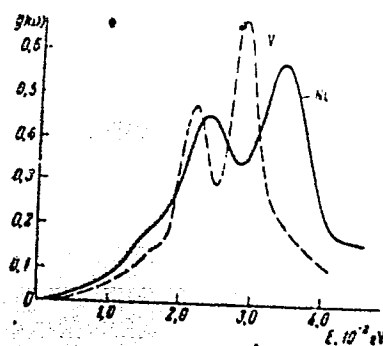
I 17604-63

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0

The phonon spectrum of nickel...

Fig. 2



SUBMITTED: October 13, 1962

Card 3/3

L 5330-66 EWT(1),T IJP(c) GG

ACCESSION NR: AP5021107

UR/0056/65/049/002/0449/0451

AUTHORS: Chernoplekov, N. A.; Zemlyanov, M. G.

TITLE: Investigation of the quasilocal level in the vibration spectrum of a lattice with heavy impurity atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965, 449-451

TOPIC TAGS: crystal lattice vibration, vibration spectrum, phonon spectrum, crystal impurity, impurity level

ABSTRACT: To obtain a direct experimental confirmation of the theoretically predicted changes in the phonon spectrum of a crystal with a heavy impurity atom, predicted theoretically by Yu. Kagan and Ya. Yosilevskiy (ZhETF v. 42, 259, 1962), the authors attempted to determine the quasilocal level in the vibration spectrum of a lattice with a heavy impurity atom, by observing the distortion of the phonon spectrum of magnesium in which 2.8 per cent of lead was introduced. The measurements of inelastic scattering of cold neutrons by poly-

Card 1/2

L 5330-66

ACCESSION NR: AP5021107

crystalline samples of pure magnesium and of the alloy $Mg_{0.972}^{Pb}Q_{0.028}$ ²⁷

were made at room temperature with a time of flight spectrometer. The number of Mg atoms was the same in both samples. Both the energy and the width of the maximum in the cross section ratio of the scattering of the lead-containing magnesium to the scattering by pure magnesium are in satisfactory agreement with the theory of Kagan and Yosilevskiy. The results therefore confirm the prediction that small admixtures of heavy impurity atoms in the lattice of light atoms change drastically the phonon spectrum of the crystal in the low frequency region, resulting in the appearance of quasilocal vibrations.

The authors thank Yu. Kagan^{SS}, M. I. Pevzner^{SS}, and V. A. Somenkov^{SS} for a discussion of the work, M. A. Andrianov^{SS}, V. A. Zinov'yev^{SS}, V. I. Kitaytsev^{SS}, and N. T. Chebotarev^{SS} for preparation and analysis of the samples, and V. G. Fedorov and Yu. V. Sereda for help with the measurements. Orig. art. has: ^{SS}2 figures and ^{SS}2 formulas

ASSOCIATION: None

SUBMITTED: 16Mar65

ENCL: 00

SUB CODE: SS

NR REF SOV: 004

OTHER: 003

Card 2/2 *hd*

CHERNOPLEKOV, S.

Methodology for increasing work norms in fitting and assembly work ("Labor organization and technical standards in fitting and assembly work in the instrument industry" by M.S. Pavlov. Reviewed by S. Chernoplekov). Sots.trud 4 no.12:148-149 D '59.

(MIRA 13:6)

(Machine-shop practice--Production standards)

CHERNOPONEVSKIN, A. I.

No. 37396--Sistema udobreniya rasteniy v sb: za ^yysokuyu kul'turu zemledeliya.
Kursk, 1949, s. 31-53.--Bibliogr: 18 Nazv.

So: Letopis' Zhurnal'zykh Statey, Vol. 7, 1949.

CHERNOPONEVSKINA, S. M.

PA 33/4913

USSR/Agronomy

Jul 48

Insecticides

Damage, Insect

"A New Harmful Insect of the Phasiane Order and Measures to Control It," S. M. Chernoponevskina, 3 pp

"Dok v-s Ak Salkhoz Nauk" No 7

Insect found in Kursk Oblast where it has damaged crops. Describes its characteristics. Lists results of tests conducted to determine relative action of various insecticides under open field conditions. Barium chloride was most effective

33/4913

USSR/Agronomy (Contd)

Jul 48

in regions with hot, dry climate. Submitted 21 Oct 47.

33/4913

CHERNOPONEVSKINA, S. M.

Chernoponevskina, S. M. - "A new pest of alfalfa, the measuring worm moth, *Phasianella (chiasma) statthrata* L.," Sbornik rabot Kurskoy obl. kompleks. s.-kh. opyt. stantsii. Kursh, 1949, p. 101-11, - Bibliog: 9 items

SO: U-4034, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

CHERNOPONEVKINA, S. M.

Chernoponevkina, S. M. - "Pests of the esparsette seed and measures in combatting them,"
Sbornik rabot Kurskoy obl. kompleks. s.kh. opyt. stantsii. Kursk, 1949, p. 112-113,
Bibliog: 6 items

SO: U-11934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

CHERNOFYATOV, M.N.

Tuberculous lesion of the epiphysial cartilage of the knee joint.
Probl. tub. 42 no.11:23-25 '64.

1. Yevpatoriyskiy detskiy kostno-tuberkuleznyy sanatoriy. (MIRA 18:8)

SOV/144-58-9-5/18

AUTHOR: Chernopyatov, N. I., Assistant of Chair of Electrical Machinery

TITLE: Investigation of the Operation of Asynchronous Motors with Single-Layer Windings, Switched Over to a Larger Number of Poles (Issledovaniye raboty asinkhronnykh dvigateley s odnosloynymi obmotkami, pereklyuchayemyi na bol'sheye chislo polyusov)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Elektromekhanika, 1958, Nr 9, pp 29-37 (USSR)

ABSTRACT: Single-layer and two-layer stator windings can be switched over to a smaller number of poles; after such switching over the motors can operate satisfactorily if the electromagnetic loads at the lower speeds are not particularly high. In the range below the synchronous speed there is a considerable drop in the mechanical characteristics of motors with single-layer windings after switching over to a smaller number of poles. In this paper an analysis is made of the physical nature of the processes which take place in single-layer motors with simple windings after switching them over to a larger number of poles. The analysis is made for

Card 1/3

SOV/144-58-9-5/18

Investigation of the Operation of Asynchronous Motors with
Single-Layer Windings, Switched Over to a Larger Number of Poles

concrete examples of windings but the conclusions apply also to windings of the same type but of different parameters. On the basis of the obtained results it is concluded that, by changing the direction of the current in the half-phases of simple single-layer 3-plane windings, it is possible to double the number of poles. However, in this case the basic field will be strongly distorted by harmonics and, therefore, the motor will not be suitable for operating at low speeds. In simple 6-pole chain windings, reconnection of part of the winding from one phase to another enables obtaining an 8-pole field; however, in addition to this basic field a considerable number of fields with a larger or smaller number of poles will be generated and, therefore, the motor will be practically incapable of operating at low speeds. These conclusions also apply to windings with parameters differing from those investigated by the author of this paper.

Card 2/3

SOV/144-58-9-5/18
Investigation of the Operation of Asynchronous Motors with
Single-Layer Windings, Switched Over to a Larger Number of Poles

There are 5 figures and 4 Soviet references.

ASSOCIATION: Kafedra elektricheskikh mashin Chelyabinskogo
instituta mekhanizatsii i elektrifikatsii sel'skogo
khozyaystva (Chair of Electrical Machinery,
Chelyabinsk Institute of Mechanization and Electrification
of Agriculture)

SUBMITTED: February 25, 1958

Card 3/3

CHERNOPYATOV, N.I., inzh.

Switching induction-motor stator windings to other r.p.m.
Prom.energ. 14 no.2:3-7. P '59. (MIRA 12:3)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo
khozyaystva.

(Electric motors, Induction)

8(5)

AUTHOR: Chernopyatov, N. I., Engineer

01V/105-59-2-7/25

TITLE: Optimal Use of Three-Phase Induction Motors in Single-Phase Circuits (Nailuchsheye ispol'zovaniye trekhfaznykh asinkhronnykh dvigateley v odnofaznykh setyakh)

PERIODICAL: Elektrichestvo, 1959, Nr 2, pp 27-30 (USSR)

ABSTRACT: One of the circuit diagrams for single-phase connection of three-phase motors is investigated. This connection permits to use the full motor capacity with supply from a single-phase network the voltage of which is equal to the rated phase voltage of the motor. At first the circuit diagram is investigated. Using the motor circle diagram for three-phase operation, the phase voltages and currents can be determined and the motor characteristic for a single-phase connection can be established. The motor torque at a single-phase connection at any slip s is determined by the formula (6). The starting torque at single-phase operation can be expressed by the starting torque M_{3n} by formula (7). At a given inductive resistance that capacitive reactance can be determined by formula (8) at which the starting torque will attain its maximum value... Then,

Card 1/3

SOV/105-59-2-7/25
Optimal Use of Three-Phase Induction Motors in Single-Phase Circuits

the symmetrical operation of the single-phase connected motor is investigated. For evaluating more completely the performance of a three-phase motor at symmetrical single-phase operation a comparison is made with a special single-phase capacitor motor having a symmetrical performance, too. From the equations (24) and (25) it can be seen that at $\cos \varphi_1 > 0.5$ the capacitor bank output at a three-phase motor in single-phase connection is smaller than at a single-phase capacitor motor. The current intensities in the feeders of the motors here compared are connected by formula (26). From (26) follows that the ratio of the current intensities is unfavorable for the single-phase operation of a three-phase motor only in case of

$0.5 < \cos \varphi_1 < \sqrt{10}/4 = 0.792$. For the motor investigated, the most unfavorable ratio of current intensities lies at $\cos \varphi_1 = \sqrt{7}/4 = 0.663$ and is of the insignificant value $(I/I'')_{\max} = 1.06$. Finally the results of the tests and the calculations are given. Reducing the motor load leads to an unbalance of the phase currents and phase voltages as is illustrated by the experimental curves. The experiments show

Card 2/3

SOV/105-59-2-7/25
Optimal Use of Three-Phase Induction Motors in Single-Phase Circuits

that at motor half load the heating temperature of the heaviest loaded phase is higher by 5 - 7°C than the heating temperature at rated output. The mechanical characteristics obtained by experiments and calculation are represented by a diagram (Fig 3). Summarizing it is stated that a three-phase induction motor of 220/380 V can be fed by a single-phase 220 V line and will attain the rated output. This was noted by the work (Ref 5) without indicating how to determine the reactances. The necessary reactances are derived from motor ratings. When using a saturable reactor a satisfying motor performance with single-phase connection can be ensured within a wide range of load. There are 4 figures and 6 Soviet references.

SUBMITTED: August 18, 1958

Card 3/3

CHERNOPYATOV, N.I., inzh.

Operation of three-phase electric motors in a single-phase 440
volt network. Mekh. i elek. sots. sel'khoz. 19 no.1:48-52 '61.

(MIRA 14:3)
1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel's-
skogo khozyaystva.

(Electric motors, Induction)

PYASTOLOV, A.A.; KABANOV, I.D.; SERDYUK, V.I.; CHERNOFYATOV, N.I.;
KURGANOVA, M.A., red.; BALLOD, A.I., tekhn. red.

[Guide to the repair of electrical equipment] Praktikum po re-
montu elektrooborudovaniia. Moskva, Izd-vo sel'khoz. lit-ry,
zhurnalov i plakatov, 1962. 167 p. (MIRA 15:5)
(Electric machinery—Maintenance and repair)

ANDRIANOV, V.N., doktor tekhn. nauk; CHERNOPYATOV, N.I., inzh.

Expediency of the use of single-phase electric motors in rural networks. Mekh. i elek. sots. sel'khoz. 21 no.5:42-44 '63.

(MIRA 17:1)

1. Moskovskaya sel'skokhozyaystvennaya akademiya im. K.A. Timiryazeva (for Andrianov). 2. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (for Chernopyatov).

FEFILOV, Saveliy Semenovich, student: CHERNOPYATOV, Nikolay Ivanovich,
dotsent

Investigating the operation of an asynchronous motor with non-symmetrical fractional winding. Izv.vys.ucheb.zav.; elektromekh. 8 no.3:350-353 '65. (MIRA 18:5)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (for Fefilov). 2. Zaveduyushchiy kafedroy elektricheskikh mashin Chelyabinskogo instituta mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.

AUTHOR: Chernopyatov, S. F. SOV/149-58-4-4/26
TITLE: On the Relation Between Pyrrhotine and Polymetallic Mineralization in the Sadon Mining Area (K voprosu o svyazi pirrotinovogo i polimetallichesкого orudeneniya v Sadonskom rudnom pole)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, 1958, Nr 4, pp 20-24 (USSR)

ABSTRACT: The eastern part of the Sadon anticline contains two types of ores: polymetallic, consisting mainly of quartz, galenite and sphalerite; pyrrhotine, consisting mainly of carbonate-pyrrhotine. On the basis of detailed analysis of various pyrrhotine lodes, the author of this paper arrived at the conclusion that their formation proceeded during several stages of mineralization. Both pyrrhotine and polymetallic ores of the Sadon mining area are composed of the same minerals, the difference being only in the respective quantities of the individual minerals. On the basis of the views presented by the author on the mechanism of formation of the pyrrhotine, it can be concluded that the pyrrhotine and the polymetallic ores formed simultaneously. The author

Card 1/2

SOV/149-58-4-4/26
On the Relation Between Pyrrhotine and Polymetallic
Mineralization in the Sadon Mining Area

enumerates a number of factors in support of his
conclusions. A table is included which contains
information on the paragenetic association of minerals
forming the deposits in the Sadon mining area.
There are 1 table and 2 Soviet references.

ASSOCIATION: Leningradskiy gornyy institut. Kafedra geologii
mestorozhdeniy poleznykh iskopayemykh (Leningrad Mining
Institute. Chair for Geology of Ore Deposits)

SUBMITTED: November 6, 1957

Card 2/2

CHERNOBYATOV, S.P., SAL'DAU, E.P.

Bismuthine in ores of the Sadon deposit. Zap. Vses. min. ob-va
88 no.6:720-722 '59. (MIRA 13:8)

1. Deystvitel'nyye chleny Vsesoyuznogo mineralogicheskogo
Obshchestva.

(Sadon region--Bismuthine)

SHAPIRO, R.B.; CHERNOPYATOV, S.F.

Present state and prospects for the dressing of iron ores in the
U.S.S.S.R. Trudy Mekhanobr. no. 122:54-152 '59. (MIRA 14:4)
(Ore dressing) (Iron ores)

CHERNOBYATOV, S. F., Cand of Geol-Min Sci -- (diss) "Certain Problems of Geology of the
Eastern Portion of Sadonskaya Anticlinial Folds," Leningrad, 1959, 18 pp
(Leningrad Mining Institute im G. V. Plekhanov) (KL, 4-60, 116)

C.HERNOPYATOV, S. F

CHERNOPYATOV, S. F.

Geological study and method of prospecting for iron ore
deposits. Razved. i okh. nedr 28 no.6:10-14 Je '62.
(MIRA 15:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki poleznykh iskopayemykh.

(Iron ores--Analysis)

CHERNOPIYATOV, S.F.

Accuracy of determining the final technological indices
of iron ore dressing. Obog. rud. 8 no.3:17-19 '63.
(MIRA 17:1)

CHERNOPYATOV, S.F.

Analysis of certain problems in the methodology of the technological investigation of iron ore deposits using the example of the New Krivoy Rog deposit of iron quartzites. Trudy Mekhanobr no.133:252-286 '63.

(MIRA-18:10)

CHERNOPYATOV, V.S.; GREBENYUK, D.S.

Device for placing bottles in annealing furnaces. Stek. 1 ker.
17 no. 11:40-41 N '60. (MIRA 13:12)

(Bottles)

TKACHEV, A.K.; CHERNOPYATOV, V.S.

New design for the device which stokes the glass-melting furnace
with batch and cullet. Stek. i ker. 18 no. 3:31-32 Mr '61.

(MIRA 14:5)

(Glass furnaces)

TVALCHRELIDZE, G.A.; CHERNITSYN, V.B.; CHERNOPYATOV, V. Ye.

New data on the Paleozoic age of some complex metal deposits
in the Northern Caucasus. Dokl. AN SSSR 159 no.5:1035-1037 L '64
(MIRA 18:1)

1. Iz Severo-Kavkazskoye geologicheskoye upravleniye i Kavkazskiy
institut mineral'nogo syr'ya. Predstavleno akademikom V.N. Smirnovym.

L 01066-66 EPA(s)-2/EWT(m)/EWP(e)/EPF(c)/EWP(i)/EPF(n)-2/EWG(m)/EPA(w)-2/EWP(j)/T/
EWP(b) WW/JG/DM/RM/WH
ACCESSION NR: AP5014538

UR/0089/65/018/005/0478/0483

621.039.566

458

AUTHOR: Tokarev, Yu. I.; Bogdanov, F. F.; Pavlovskaya, Ye. I.; Chernopyatova, A.P.

TITLE: Development of technology for the manufacture of filters to purify organic coolants and an investigation of their hydraulic resistance

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 478-483

TOPIC TAGS: organic cooled reactor, organic coolant, coolant contamination, coolant filter, metal ceramic filter

ABSTRACT: The authors report the results of an experimental investigation of hydraulic resistance of metal-ceramic disc filters for organic coolants, tested under working conditions. This investigation is motivated by the fact that in organic-cooled reactors (such as "Arbus" in the SSR or OMRE in the USA) the primary loop coolant always contains some inorganic contaminants, in spite of a thorough cleaning. The technology of preparing the filters is described. Stacks of filters made of powders of different sizes were tested for filtering ability and for hydraulic resistance by means of special experiments, using monoisopropyl diphenyl at 300C as the test coolant. The set-up is briefly described. Plots of the pressure differential against the flow rate and of the local resistance to flow against the Rey-

Card 1/2

L 01066-66

ACCESSION NR: AP5014538

holds number are presented, and an empirical formula for the latter is derived. The test results show that the filters can be regenerated by means of a current of coolant in the opposite direction, with the contaminants discarded into an overflow tank. Orig. art. has: 5 figures, 1 formula, and 2 tables.

ASSOCIATION: none

SUBMITTED: 28Apr64

ENCL: 00

SUB CODE: NP

NR REF SOV: 005

OTHER: 001

Card 2/2

CHERNOPYZHSKIY, D. G.

"Apartment Houses of the Corridor Type." Sub 19 Jun 51, Moscow Order
of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

CHERNOROT, A.M., provizor

More about the use of improved equipment in drug production. Apt.
delo 7 no.1:34-35 Ja-F '58. (MIRA 11:3)

1. Zaveduyushchiy aptekoy No.12 Dnepropetrovska, USSR.
(PHARMACY--EQUIPMENT AND SUPPLIES)

CHERNOROTOV, E. S. (and B. A. Alekseyev, V. S. Zolotarev, V. V. Panin, G. Y. Shchepkin)

"ELECTROMAGNETIC SEPARATION OF ISOTOPES OF THE RARE-EARTH ELEMENTS".

By B. A. Alekseyev, V. S. Zolotarev, V. V. Panin, G. Y. Shchepkin, E. S. Chernorotov.

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept. 1958.

CHERNOROTOV, Y.E.S.

1) **PHASE 1 BOOK EXPLANATION** 80V/213

International Conference on the Peaceful Use of Atomic Energy. 2nd, Geneva, 1958

Booklet Sovietishkikh yubeyshykh polucheniye i primeneniye izotopov (Reports of Soviet Scientists on the Production and Application of Isotopes) Moscow, Atomizdat, 1959. 388 p. (Series: 212: Trade, vol. 6) 6,000 copies printed.

Eds. (title page): G.V. Kurdyumov, Academician, and I.I. Morzhov, Corresponding Member, USSR Academy of Sciences; Ed. (Inside book): Z.D. Andreyenko; Tech. Ed.: Z.D. Andreyenko.

PURPOSE: This book is intended for scientists, engineers, physicians, and biologists engaged in the production and application of atomic energy to research, for professors and students and non-graduate students of higher technical schools, and for nuclear scientists in general; and for the general public interested in atomic science and technology.

COVERAGE: This is volume 6 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Use of Atomic Energy held in Geneva from September 1 to 13, 1958. Volume 6 contains 32 reports on: 1) modern methods for the production of stable radioactive isotopes and their labeled compounds; 2) methods for the separation of isotopes with the aid of isotopes in the field of chemistry, metallurgy, machine building, and agriculture; and 3) dosimetry of ionizing radiation. Volume 6 was edited by: S.V. Levinshchik, Candidate of Medical Sciences; V.J. Preskhor, Candidate of Chemical Sciences; and V.V. Dedov, Candidate of Medical Sciences. See 80V/2081 for titles of volumes of the set. References appear at the end of the articles.

1. Yabvar, O.R., and V.J. Dedov. Means of Developing Remote Control Methods in the Radiochemical Laboratories of the AN SSSR (Report No. 2025)

2. Malov, M.P., A.G. Zai'dovich, A.J. Prudkov, and I.B. Danilov. Commercial Production of Deuterium by the Low-Temperature Distillation Method (Report No. 2322)

3. Overstapeli, I.D., R.Ya. Rubchey, and V.E. Vithakaya. Separation of Isotopes by Diffusion in a Steam Flow (Report No. 2086)

4. Zolotarev, V.S., A.I. Il'in, and Ye.G. Kozar. Separation of Isotopes on Electromagnetic Units in the Soviet Union (Report No. 2303)

5. Alekseyev, B.A., S.Y. Bulysin, V.S. Zolotarev, B.V. Pavin, Ye.S. Chernomir, and O.Ya. Gheorpin. Separation of Isotopes of Rare-earth Elements by the Electromagnetic Method (Report No. 2217)

6. Muravov, B.M., R.K. Nakov, M.S. Ioffe, B.G. Brezhnev, and G.M. Fradkin. Ion Source for the Separation of Stable Isotopes (Report No. 2303)

7. Meilin, M.Ye, and P.M. Morozov. Electric Field Effect in Ion Beams on Stable Isotope Separation by the Electromagnetic Method (Report No. 2303)

8. Bogdanov, B.G., P.L. Grusin, G.I. Yermolayev, and I.D. Minitskiy. Use of Radioactive Isotopes in Metallurgical Research (Report No. 2218)

9. Shumilovskiy, B.M., V.A. Yumashovskiy, and I.M. Tatars. The Theory and Practice of Mass-type Instruments Based on Radioactive Isotopes (Report No. 2202)

10. Zaslavskiy, Ye.S., G.I. Gory, and R.S. Shcherbina. Studying the Mechanism of Protection of Rubbing Surfaces Against Wear Due to Corrosion (Report No. 2198)

11. Baryantsev, S.Ye, and L.Ye. Matyuk. The Td-170, Bz-153, and Co-114 as Sources of Radiation for Checking Thin-film Products (Report No. 2233)

12. Kuch, B.I., A.S. Zev'yakov, and G.I. Kuyrin. Studying the Redistribution of Elements in Metal Alloys and Weld Compounds by Autoradiographic and Radiometric Methods (Report No. 2236)

13. Grusin, P.L., A.I. Yermolayev, V.S. Yemel'yanov, G.O. Rybora, G.B. Fedorov. Studying the Diffusion and Distribution of Elements in Alloys of Zirconium and Titanium by the Radioactive Isotope Method (Report No. 2326)

L 1930-66 EWT(m)/EPF(c)/ETC/EPF(r)-S/L (m) DS, m/RA

ACCESSION NR: AT5022584

UR/3136/64/000/787/0001/0014

AUTHOR: Chernorotov, Ye. S.; Potekhin, N. V.; Novikov, P. D.

TITLE: Purification and preparation of water in nuclear reactors

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-787, 1964. Vodoochistka i vodopodgotovka na yadernykh reaktorakh. Report no. 3, 1-14

TOPIC TAGS: water cooled nuclear reactor, water moderated reactor, water purification, ion exchange resin

ABSTRACT: The report describes the experience with the use of an H^+ -cation prefilter for purifying water of the primary loop of a physical and technical research reactor (RFT reactor) and of the reactor of the "Lenin" atomic icebreaker. The method of increasing the efficiency of mixed ion-exchange layers in purifying the water of first loops by using such prefilters or layers of cation exchanger in the hydrogenated form is discussed. If the pH of the water is about 7, the cation exchanger is used in the H form. In the presence of higher pH values, the cation exchanger is used in the salt form. However, in this case it is preferable to use separate (not mixed) layers with the cation exchanger in the corresponding salt form and the anion exchanger in the hydroxyl form. Orig. art. has: 2 figures.

Card 1/2

L 1930-66

ACCESSION NR: AP5022584

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP,GC

NO REF SOV: 001

OTHER: 003

Card

mlr
2/2

SS SK

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, 15-57-1-504
p 81 (USSR)

AUTHORS: Chernoruk, S. G. Romasheva, M. R.

TITLE: An Experimental Study in the Differential Mobility of the Components in Rocks and Ores (Eksperimental'noye izucheniye differentsial'noy podvizhnosti komponentov gornykh porod i rud)

PERIODICAL: Sb. nauch. tekhn. inform. M-vo geol. i okhrany nedr, 1955, Nr 1, pp 43-44.

ABSTRACT: The authors studied the seepage effect of 0.1 and 0.01 molar solutions of $ZnCl_2$, $ZnSO_4$, and $Pb(NO_3)_2$ through rocks: dolomitized limestone, quartz sandstone, siltstone, and mudstone. The seepage effect was studied by 1) seepage, and 2) the osmotic method. The results of the osmotic method show that the dolomitized limestone, quartz sandstone, siltstone, and polymict sandstone with average pore radii of $1.0 \cdot 10^{-4}$ to $1.0 \cdot 10^{-5}$ cm have a small degree of semipermeability

Card 1/2